

# Quadruplex LLDPE Service Drop. ACSR Neutral - Messenger

Aluminum Conductors With Linear Low Density Polyethylene Insulation.

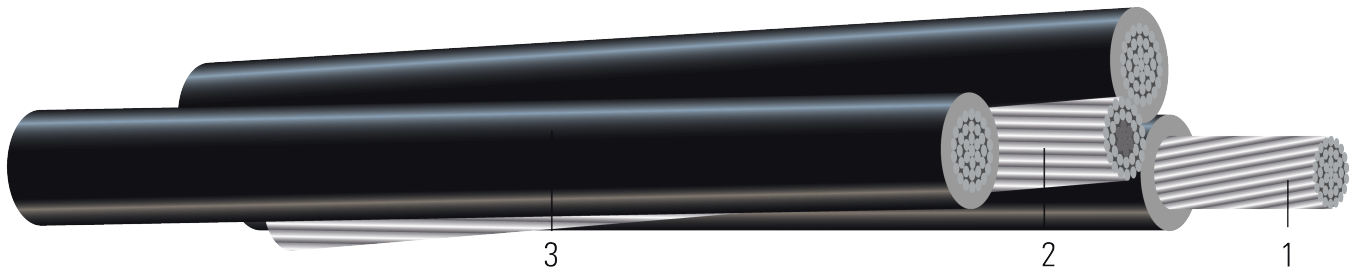


Image not to scale. See Table 1 for dimensions.

## CONSTRUCTION:

1. **Conductor:** Conductors are stranded, compressed 1350-H19 aluminum
2. **Messenger:** ACSR Neutral
3. **Insulation:** Linear Low Density Polyethylene (LLDPE)

## APPLICATIONS AND FEATURES:

Used to supply power, usually from a pole-mounted transformer, to the user's service head where connection to the service entrance cable is made. To be used at voltages of 600 volts phase-to-phase or less and at conductor temperatures 75°C for Linear Low Density Polyethylene (LLDPE) insulated conductors.

## SPECIFICATIONS:

- ASTM B230 Aluminum, 1350-H19 Wire for Electrical Purposes
- ASTM B231 Standard Specification for Concentric-Lay-Stranded Aluminum 1350 Conductors
- ASTM B400 Standard Specification for Compact Round Concentric-Lay-Stranded, Aluminum 1350 Conductors
- ASTM B901 Standard Specification for Compressed Round Stranded Aluminum Conductors Using Single Input Wire Construction. (The number of strands for both phase and neutral may differ)
- ICEA S-76-474 Standard for Neutral-Supported Power Cable Assemblies with Weather-Resistant Extruded Insulation Rated 600V



**Table 1 – Weights and Measurements**

Code Word	Phase Cond. Size	Phase Strand	Dia. Over Phase Conductor	Phase Insul. Thickness	Dia. Over Phase Insulation	Neutral Cond. Size	Approx. OD	Approx. Weight
	AWG/Kcmil	No.	inch	mil	inch	AWG/Kcmil	inch	lb/1000ft
Suffolk	3/0	17	0.443	60	0.563	3/0	1.359	837

All dimensions are nominal and subject to normal manufacturing tolerances

1. The actual number of strands may differ for single input wire per ASTM B901

**Table 2 – Electrical and Engineering Data**

Code Word	Phase Cond. Size	DC Resistance @ 25°C	AC Resistance @ 75°C	Inductive Reactance @ 60Hz	GMR	Allowable Ampacity In Air 90°C
	AWG/Kcmil	Ω/1000ft	Ω/1000ft	Ω/1000ft	ft	Amp
Suffolk	3/0	0.104	0.1335	0.032	0.0139	185

Notes:

1. DC resistances include a 1% length factor for plexing.

2. Inductive reactance assumes the neutral is carrying current.

3. Phase conductors assumed to be reverse lay stranded, compressed construction.

4. Phase spacing assumes cables are touching.

5. Resistances shown are for the phase conductor only.

6. Ampacity based on conductor temperature of 75°; ambient temperature of 40°C; emissivity 0.9; 2 ft./sec. wind in sun.

Size	Code Word	OD (inches)
#6	Turkey	0.198
#4	Swan	0.250
#2	Sparrow	0.316
1/0	Raven	0.398
2/0	Quail	0.447
3/0	Pigeon	0.502
4/0	Penguin	0.684
336.4	Merlin	0.563

